

Application No. 09/885568
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Amendment
Attorney Docket No. S63.2B-9515-US01

Amendments To The Claims:

Please cancel claims 17, 22 and 23.

1. (Currently Amended) A balloon for a medical device comprising:
a ~~semi-compliant polymer~~ block copolymer matrix material; and
a plurality of fibers distributed in the matrix material to provide reinforcement thereof,
the fibers being distributed in a selected direction relative to the balloon axis and composed of
material which has a greater tensile strength than the matrix material.
2. (Original) A balloon as in claim 1 wherein the fibers are distributed in the matrix material
helically relative to the balloon axis.
3. (Original) A balloon as in claim 2 wherein said fibers are cores of polymeric material
coextruded with the matrix polymer material.
4. (Original) A balloon as in claim 2 wherein the bulk elongation core polymeric material is
150% or less.
5. (Original) A balloon as in claim 2 wherein the core polymeric material has a bulk elongation
less than the matrix material when oriented in the direction of the longitudinal axis.
6. (Original) A balloon as in claim 1, the balloon having a wall composed of a plurality of
laminate layers, at least one layer of which comprises said polymer matrix material and said
fibers.
7. (Original) A balloon as in claim 6 wherein said laminate layers comprise an alternating series
of fiber-containing and fiber-free layers.
8. (Original) A balloon as in claim 7 having at least 7 of said laminate layers.
9. (Original) A balloon as in claim 6 wherein the fibers are distributed in the matrix material
helically relative to the balloon axis.
10. (Original) A balloon as in claim 9 wherein said fibers are cores of polymeric material
coextruded with the matrix polymer material.
11. (Original) A balloon as in claim 9 wherein said fibers are LCP fibers having a diameter of
from 0.01 to about 10 microns.
12. (Original) A balloon as in claim 6 having a body portion wherein the fibers are oriented
substantially parallel to the longitudinal axis of the balloon.

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13. (Original) A balloon as in claim 12 wherein the fibers are LCP fibers having a diameter of from 0.01 to about 10 microns.
14. (Currently Amended) A balloon for a medical device comprising from 7 to 50 total polymer layers alternating between layers (A) and (B), layer (A) composed of a ~~compliant or semi-compliant polymer~~ block copolymer material and layers ~~layer (B)~~ layer (B) composed of a ~~compliant or semi-compliant~~ block copolymer matrix polymer material and LCP.
15. (Canceled)
16. (Currently Amended) A balloon as in claim 14 wherein the ~~single polymer~~ block copolymer material of layer (A) and the block copolymer matrix polymer material of layer (B) are the same.
17. (Canceled)
18. (Previously Presented) A balloon as in claim 14 wherein the ratio A/B of the total thickness of the two types of layers, (A) and (B) respectively, is from about 5 to about 15.
19. (Original) A balloon as in claim 18 wherein said ratio is from 8 to 10.
20. (Previously Presented) A balloon as in claim 14 wherein in the layers (B) the LCP polymer is present in the blend in an amount of from about 5 to about 25 % by weight.
21. (Original) A balloon as in claim 14, wherein the balloon has a longitudinal axis, at least some of said laminate layers are formed from an extruded blend of a matrix polymer material and an LCP polymer material, and the LCP polymer forming fibers within the matrix polymer with the fibers oriented substantially in a longitudinal or helical direction relative to the balloon axis.
22. (Canceled)
23. (Canceled)
24. (New) The balloon of claim 14 wherein said block copolymer of layer (A) is compliant or semi-compliant and said block copolymer of layer (B) is compliant or semi-compliant.
25. (New) The balloon of claim 14 wherein said block copolymer of layer (A) and said block copolymer of layer (B) are selected from the group consisting of block copolymers comprising polyamide blocks and polyether blocks, block copolymers comprising polyester blocks and polyether blocks, and mixtures thereof.